



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,858	02/23/2004	Min-soo Kim	Q77192	5461
23373 7590 04/30/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER				
MERED, HABTE				
ART UNIT		PAPER NUMBER		
2416				
MAIL DATE		DELIVERY MODE		
04/30/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Supplemental
Notice of Allowability**

Application No.

10/782,858

Examiner

HABTE MERED

Applicant(s)

KIM ET AL.

Art Unit

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to after final amendment filed on 2/12/09.
2. ☒ The allowed claim(s) is/are 1-3, 5-8, 10 and 11 (renumbered as 1-9 respectively).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input checked="" type="checkbox"/> Other <u>Attachment A-Listing of Claims.</u> |
|---|--|

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2416

EXAMINER'S AMENDMENT

1. The instant Examiner's Amendment replaces the Examiner's Amendment mailed on 3/11/2009. The Examiner's Amendment mailed on 3/11/09 erroneously indicated cancelled claim 9 as allowed and this specific error is corrected by the instant Examiner's Amendment.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Applicant's Attorney, Diallo T. Crenshaw (52, 778) on 02/26/09.

3. The claims have been amended as shown in Attachment A.
4. **Claims 1-3, 5-8, 10 and 11** are allowed.
5. The following is an examiner's statement of reasons for allowance:

Claims 1-3 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or suggest a method of allocating an Internet Protocol (IP) address and detecting duplication of the IP address in a network environment, comprising the steps of:

allocating an initial IP address to a terminal by the terminal;

sending and receiving broadcast messages;

detecting duplication of the IP address while sending and receiving the broadcast messages;

updating a Duplicate Address Detection (DAD) table through searches of a DAD table and a history table; and

determining whether a collision of the IP address occurs using a DAD timer handler,

wherein the broadcast messages are one-hop broadcast messages, and each entry of the Duplicate Address Detection (DAD) table is periodically updated by the one-hop broadcast messages,

wherein each entry of the DAD table includes an IP address of at least one of a plurality of terminals in a network, a sequence number of the at least one of the plurality of terminals, a temporary ID of the at least one of the plurality of terminals and a flag, and

wherein the history table stores a latest sequence number and temporary ID generated by a present terminal.

Claims 5-8, 10, and 11 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or suggest a method of allocating an Internet Protocol (IP) address and detecting duplication of the IP address in a network environment, comprising the steps:

- (a) initially allocating a tentative IP address to a terminal, by the terminal;
- (b) determining whether the tentative IP address can be used by the terminal;
- (c) comparing the tentative IP address with at least one other IP address;
- (d) if the tentative IP address has a duplicate, selecting an advisory IP address that does not exist;

(e) sending the advisory IP address to the terminal;

(f) performing step (b) using the advisory IP address as the tentative IP address wherein the at least one other IP address is located in a Duplicate Address Detection (DAD) table, and

wherein each entry of the Duplicate Address Detection (DAD) table is periodically updated by a one-hop broadcast message.

wherein said each entry of the DAD table includes an IP address of at least one of a plurality of terminals in a network, a sequence number of the at least one of the plurality of terminals, a temporary ID of the at least one of the plurality of terminals and a flag, and

wherein a history table stores a latest sequence number and temporary ID generated by a present terminal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HABTE MERED whose telephone number is (571)272-6046. The examiner can normally be reached on Monday to Friday 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on 571 272 7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
Supervisory Patent Examiner, Art Unit 2416

/Habte Mered/
Examiner, Art Unit 2416
4-20-09